

Two New Varieties of Ants (Hymen.: Formicidae).

By M. R. SMITH, Agricultural and Mechanical College,
Mississippi.

The writer has recently observed two new varieties of ants which seem worthy of description. One of these ants, *Aphaenogaster nigripes*, seems to be a very common variety in this locality as is indicated by the numerous specimens in the college collection here. Not only is this ant found in Mississippi but it also occurs in North and South Carolina. It is easily separated from the species by means of its very dark, shining legs. The body of *nigripes* is darker in color and more rough in sculpture than that of *lamellidens*.

The other new variety of ant is from Lagunitas, California. This ant is without doubt a member of the *caryae* group as is shown by its emarginate clypeus, general shape of body and color. Dr. Wheeler, who has a large collection of ants of the *caryae* group, states that this new variety, *essigi*, is more closely allied to the variety *clarithorax* than to any other ant of the group. Although *essigi* bears a striking resemblance to *clarithorax* in color, it differs from this ant in several respects; it has more flattened eyes, a more uniform glabrous or shining body appearance and it lacks the definite, elongate, piligerous foveolae on the clypeus and cheeks, which is characteristic of *clarithorax*.

***Camponotus caryae* var. *essigi* var. nov.**

Worker major: Length, 6.5-7 mm.

Head, excluding mandibles, about as broad as long, broader behind than in front, with noticeably excised posterior border and convex sides. Clypeus convex, subrectangular, apical border depressed and with a prominent notch or emargination. Frontal carinae lyrate. Eyes oblong, flattened. Antennal scapes not reaching the posterior corners of the head, slender at the base, gradually enlarging toward the tips. Thorax short, robust, with the pronotum narrower than the head; epinotum compressed laterally, the sub-equal base and the declivity forming at their juncture a slightly rounded, obtuse angle. Petiole with convex anterior and flattened posterior surface and rounded, entire border. Gaster oblong.

Head, thorax, petiole, gaster, appendages and antennae, with exception of the funiculi, smooth and shining. Mandibles shining, with scattered but distinct punctures. Head covered with distinct but scattered punctures, the punctures becoming less apparent on the posterior

corners and border of the head. Head, thorax and gaster finely shagreened, that on the gaster transverse and very fine, almost indistinct.

Hairs yellowish, erect, present on the gula, mandibles, clypeus, front and vertex of the head, the dorsal surface of the thorax, coxae of the legs, the superior border of the petiole and gaster. Tips of scapes, femora and tibiae with a few, small, erect hairs. Pubescence on the head and thorax short and sparse, longer on the gaster.

Reddish brown: head and abdomen darker, the latter black with a yellowish posterior border to each segment. The mandibles, clypeus, funiculi and posterior corners of the head lighter than the rest of the head; the posterior portion of the thorax and the petiole deeply tinged with black.

Worker minor: Length, 4-4.5 mm.

Head narrower in front than behind, with rounded posterior border and convex sides. Clypeus trapezoidal, convex, with anterior margin slightly cut out or emarginate. Scapes reaching past posterior corners of the head, not noticeably enlarged from base to tip. Thorax similar to that of the major worker but the pronotum is almost as wide as the head.

Hairs yellowish, erect, present on the gula, mandibles, clypeus, front and vertex of the head, the dorsal surface of the epinotum, the superior border of the petiole, the gaster and coxae of the legs.

Reddish brown: Head, mesonotum, epinotum, petiole and gaster darker; the antennae, pronotum and appendages lighter.

This beautiful variety was sent to the writer for determination by Professor E. O. Essig, of the Agricultural Experiment Station of the University of California. The ants were taken at Lagunitas, California, on June 23, 1913. The variety is named in honor of Professor Essig, who has very kindly sent the writer numerous Californian ants for identification.

Camponotus essigi is evidently a variety of the *caryae* group as is shown by its emarginate clypeus, its general shape, size and color. Nothing is known concerning its nesting habits but the ants undoubtedly, like their nearest relatives, live in galls, in niches under the bark or in limbs of trees.

This species may be distinguished from the other forms of the *caryae* group by its very striking glabrous or shining appearance, its much flattened eyes and by the reddish brown thorax and appendages, with darker head and abdomen. It is very closely allied to the variety *clarithorax*, which it resembles very much in color.

Described from seven workers; cotypes in the collections of Dr. W. M. Wheeler and the writer.

***Aphaenogaster lamellidens* Mayr. var. *nigripes* var. nov.**

Worker:

This variety can easily be distinguished from the species by means of its color and sculpture.

The head, thorax, petiole and postpetiole are deep reddish brown and subopaque, the coxae of the legs and the gaster lighter and more glabrous, while the femora and tibiae are almost a shining black. The specimens of *Aphaenogaster lamellidens* before the writer are light yellowish red, with the head, thorax, petiole and postpetiole sub-opaque, the antennae and legs darker, the gaster light yellowish and shining.

The most striking difference between the two is the color of the legs; the femora and tibiae in *nigripes* being very dark, almost black and somewhat shining, while the femora and tibiae of *lamellidens* are not noticeably dark or shining.

The sculpture of the two is noticeably different; the head, thorax, petiole and postpetiole of the variety are much coarser and more rugose reticulate than in *lamellidens*, this being particularly true of the dorsal surface of these parts.

Specimens of this ant have been collected from various towns in Mississippi but particularly from the towns of Fulton, Columbus, Aberdeen, and A. and M. College. The writer has specimens in his collection from South Carolina and Dr. W. M. Wheeler reports that he has specimens from North Carolina. Judging from the records of distribution, this ant must be a rather stable and widely distributed southern variety of *lamellidens*.

There is considerable variation in the general color of *nigripes* but the dark color of the legs is always constant and furnishes a character which easily separates this ant from the species.

Described from ten workers; cotypes in the writer's collection.

Type locality: Agricultural & Mechanical College, Mississippi.